

Lake Hall Lake Vegetation Index Results (9-4-2013)

The Lake Vegetation Index score for Lake Hall was 66, placing the lake's vegetative community in the healthy category.

The Lake Vegetation Index (LVI) is a multi-metric index that evaluates how closely a lake's plant community resembles one that would be expected in a condition of minimal human disturbance. It is based on a rapid field assessment of aquatic and wetland plants as indicators of various effects of human disturbance over time. Plants respond to physical disturbances such as introduction

of exotic species or lakeshore alterations, and chemical disturbance such as introduction of excess nutrients, particulates, or herbicides from the surrounding land uses.

The LVI method is performed from a boat, and involves dividing a lake into 12 units and identifying plants in 4 of the 12 units. Plants are identified in the selected unit by a visual boat "drive by" and also via a transect approach. The resulting data is used to calculate the LVI and is evaluated according to the scoring system in Table 1. County staff are available to discuss this information as desired.

TABLE 1. Category names, ranges of values for LVI, and example descriptions of biological conditions typically found for that category.

Aquatic life use category	LVI Range	Description
Exceptional	78–100	Nearly every plant present is a species native to Florida, invasive taxa typically not found. About 30% of taxa present are identified as sensitive to disturbance.
Healthy	43–77	About 85% of plant taxa are native to Florida; invasive taxa present. Sensitive taxa have declined to about 15%.
Impaired	0–42	About 70% of plant taxa are native to Florida. Invasive taxa may represent up to 33% of total taxa. Less than 10% of the taxa are sensitive.

Sixty-two species were found during the survey. The native species coontail (*Ceratophyllum demersum*), fanwort (*Cabomba caroliniana*) and leafy bladderwort (*Utricularia foliosa*) were the most dominant species in the lake. Other native shoreline vegetation included; red maple (*Acer rubrum*), buttonbush (*Cephalanthus occidentalis*) and water pennywort (*Hydrocotyle* sp.).

Unfortunately, Chinese tallow tree (*Sapium sebiferum*), water hyacinth (*Eichhornia crassipes*), hydrilla (*Hydrilla verticillata*),

and torpedo grass (*Panicum repens*), all listed as Category I Invasive Exotics by the Florida Exotic Pest Control Council, were found in Lake Hall. Alligator weed (*Alternanthera philoxeroides*) was the only Category II Invasive Exotic found in the lake. Burhead sedge (*Scirpus cubensis*) was also found in Lake Hall. Experts are in disagreement about whether this species is a native or non-native to Florida.

For a complete list of plants found during the LVI survey, please see Table 2.

TABLE 2. Scientific and common names of the plants identified during the Lake Hall LVI survey (9-4-13).

Scientific Name	Common Name
<i>Acer rubrum</i>	red maple
<i>Alternanthera philoxeroides(II)</i>	alligator weed
<i>Ambrosia artemisiifolia</i>	common ragweed
<i>Ampelopsis arborea</i>	peppervine
<i>Andropogon</i> sp.	broomsedge
<i>Bacopa caroliniana</i>	lemon Bacopa
<i>Betula nigrans</i>	river birch
<i>Bidens laevis</i>	smooth beggartick
<i>Boehmeria cylindrica</i>	false nettle
<i>Brasenia schreberi</i>	watershield
<i>Cabomba caroliniana</i>	fanwort
<i>Cephalanthus occidentalis</i>	buttonbush
<i>Ceratophyllum demersum</i>	coontail
<i>Cyrilla racemiflora</i>	swamp titi
<i>Decodon verticillatus</i>	swamp loosestrife
<i>Eichhornia crassipes (I)</i>	water hyacinth
<i>Eleocharis baldwinii</i>	road-grass
<i>Erechtites hieracifolia</i>	American burnweed
<i>Eupatorium</i> sp.	Eupatorium
<i>Fuirena pumila</i>	dwarf umbrella sedge
<i>Habenaria repens</i>	water spider orchid
<i>Hydrilla verticillata (I)</i>	Hydrilla
<i>Hydrocotyle</i> sp.	water pennywort
<i>Liquidamber styraciflua</i>	American sweetgum
<i>Ludwigia arcuata</i>	needleleaf Ludwigia
<i>Ludwigia leptocarpa</i>	anglestem primrose willow
<i>Ludwigia sphaerocarpa</i>	globe-fruited primrose willow
<i>Ludwigia suffruticosa</i>	shrubby primrose willow
<i>Mayaca fluviatilis</i>	stream bogmoss
<i>Mikania scandens</i>	climbing hempvine
<i>Myrica cerifera</i>	wax myrtle
<i>Myriophyllum heterophyllum</i>	twoleaf watermilfoil
<i>Nelumbo lutea</i>	American lotus
<i>Nuphar</i> sp.	spatterdock
<i>Nymphaea odorata</i>	fragrant waterlily
<i>Nymphoides aquatica</i>	banana lilly
<i>Nyssa sylvatica</i> var. <i>biflora</i>	swamp tupelo

<i>Panicum repens (I)</i>	torpedo grass
<i>Paspalum urvillei</i>	vaseygrass
<i>Pinus taeda</i>	loblolly pine
<i>Polygonum densiflorum</i>	denseflower knotweed
<i>Polygonum hirsutum</i>	hairy smartweed
<i>Polygonum punctatum</i>	dotted smartweed
<i>Pontederia cordata</i>	pickerelweed
<i>Quercus virginiana</i>	southern live oak
<i>Rhexia mariana</i>	Maryland meadowbeauty
<i>Saccharum giganteum</i>	sugarcane plumegrass
<i>Sacciolepis striata</i>	American cupscale-grass
<i>Sagittaria filiformis</i>	threadleaf arrowhead
<i>Salix carolina</i>	coastal plain willow
<i>Sapium sebiferum(I)</i>	Chinese tallow tree
<i>Scirpus cubensis</i>	burhead sedge
<i>Scirpus cyperinus</i>	woolgrass
<i>Solidago fistulosa</i>	pine barren goldenrod
<i>Triadenum virginicum</i>	Virginia marsh St. John's wort
<i>Typha</i> sp.	cattail
<i>Utricularia biflora (U. gibba)</i>	humped bladderwort
<i>Utricularia foliosa</i>	leafy bladderwort
<i>Utricularia purpurea</i>	eastern purple bladderwort
<i>Vallisneria americana</i>	eelgrass
<i>Vitis rotundifolia</i>	muscadine
<i>Xyris</i> sp.	yellow-eyed grass

I - Category I Invasive Exotics

II - Category II Invasive Exotics

For additional information about the LVI, please review the Florida Department of Environmental Protection's [LVI Primer document](#).

For additional information about Category I and II invasive exotic plants, please visit the [Florida Exotic Pest Plant Council](#) webpage.

For more detailed information about the above species, please visit the [Atlas of Florida Vascular Plants](#) website.